## APPENDIX A

INTERIM DRILLING POLICY - DEVELOPMENT AUTHORIZED CONCURRENT WITH EIS PREPARATION FOR THE ATLANTIC RIM COALBED METHANE PROJECT

#### **APPENDIX A**

# Interim Drilling Policy - Development Authorized Concurrent with EIS Preparation for the Atlantic Rim Coalbed Methane Project

During the preparation of the Atlantic Rim Coalbed Methane EIS, the Bureau of Land Management's (BLM) authority to allow drilling on the federal mineral estate is limited. The Council on Environmental Quality (CEQ) Regulations and 40 CFR 1506.1, *limitations on actions during NEPA process* to comply with the National Environmental Policy Act (NEPA) provide the following regarding limitation on concurrent authorizations:

#### Section 1506.1

- (a) Until an agency issues a record of decision as provided in para. 1505.2 (except as provided in paragraph (c) of this section), no action concerning the proposal shall be taken which would:
  - (1) Have an adverse environmental impact; or
  - (2) Limit the choice of reasonable alternatives.
- (b) If any agency is considering an application from a non-federal entity, and is aware that the applicant is about to take an action within the agency's jurisdiction that would meet either of the criteria in paragraph (a) of this section, then the agency shall promptly notify the applicant that the agency will take appropriate action to insure that the objectives and procedures of NEPA are achieved.
- (c) While work on a required program environmental impact statement is in progress and the action is not covered by an existing program statement, agencies shall not undertake in the interim any major Federal action covered by the program which may significantly affect the quality of the human environment unless such action:
  - (1) Is justified independently of the program;
  - (2) Is itself accompanied by an adequate environmental impact statement; and
  - (3) Will not prejudice the ultimate decision on the program. Interim action prejudices the ultimate decision on the program when it tends to determine subsequent development or limit alternatives.
- (d) This section does not preclude development by applicants of plans or designs or performance of other work necessary to support an application for Federal, State or local permits or assistance....

The above regulations and the following criteria and conditions will be used by the BLM to determine new exploratory activities allowed on Federal surface and/or minerals during preparation of the EIS. They also establish conditions under which these activities will be approved. The intent of these criteria and conditions are to keep all activity within the scope of existing analysis and at a reasonable level, to allow limited drilling activity for acquisition of additional data necessary for completion of the EIS, and to prevent unnecessary hardship to leaseholders. These criteria may be modified by the BLM authorized officer (AO) if any of the allowed activities are viewed as having a potentially significant effect on the environment or prejudice the ultimate decision on the drilling program for the EIS as outlined in the CEQ regulations quoted above.

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#### **Activities Allowed on Federal Lands and Minerals During EIS Preparation**

- 1. A maximum of 200 coalbed methane wells will be allowed within the project area, for research and exploratory purposes, during the interim period in which the EIS is prepared. Wells will only be allowed in the nine pods the operators have proposed and a maximum of only 24 coalbed methane wells will be allowed within any pod, regardless of multiple zones to be evaluated (see map).
- 2. Activities within individual pods will be authorized by BLM. For any pod location which overlaps the boundary of a sensitive resource area for sage grouse, mountain plover, raptors, big game migration corridors, and sensitive plants, appropriate stipulations and mitigation will be applied to protect any sensitive resources present (see Term Definitions below). Some sensitive resources such as high density paleontological or cultural resources sites, are not mapped and will also be handled on a pod basis.
- 3. Existing coalbed methane wells (two wells re-completed as coalbed methane producers in the Cow Creek Unit by Double Eagle and one new well completed by Petroleum Development Corporation, to the east of this unit) will count toward the above well limits. As Federal 1691 #10-8 has been plugged and abandoned, it will not count toward the above well limit. In addition, the six coalbed methane wells originally permitted by North Finn LLC and drilled in Section 5, T17N, R90W, and the well located in Section 36, T15 N, R91W, will not count toward the allowed well number, as long as they are not included as part of any proposed pod. In addition, required injection wells and monitoring wells will not count toward the well limit.
- 4. Any modifications proposed to the approved pods (i.e. changing pod locations, drilling wells outside of the current pod locations, or increasing the total number of wells allowed during interim drilling), will only be approved if geologic, hydrologic, or reservoir characteristics support a change. These changes will be allowed after review by, and concurrence of, the Reservoir Management Group and authorization by the BLM, Rawlins Field Office. Additional federal drainage protection wells may be required.
- 5. During preparation of the EIS, coalbed methane wells and associated roads and pipelines on any private surface/private mineral where the operator has, or has obtained legal access (i.e., county roads, approved BLM ROW grant or private access road) prior to approval of the interim drilling plan, may be developed as deemed appropriate by the operator/lessee. However, these wells will count toward the total number of wells allowed to be drilled under this interim drilling policy.

#### **Criteria and Conditions that Apply to Interim Drilling Operations**

- 1. A detailed Plan of Development/Surface Use Plan (POD/SUP) and Master Drilling Plan for each individual pod, using guidance provided by the BLM Rawlins Field Office, will be submitted and approved prior to surface disturbing activities.
- 2. The operator(s) agree to supply the geologic, coal, and water data information discussed in Appendix C of this document.
- 3. Prior to initiating interim drilling, an environmental assessment (EA), including a detailed Water Management Plan will be prepared and approved for each individual pod. Because

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of the current BLM workload, and in order to expedite the completion of the EAs, it is recommended that these documents be prepared by a third-party contractor.

- 4. All pod EA's will be submitted to the BLM in pdf format and each document will be placed on the BLM Wyoming web page. A 30-day public review of each document will occur from the date the document is placed on the site. BLM will be responsible for writing the Decision Record for each EA.
- 5. A 1/4 mile buffer is required between surface disturbing activities and the Overland Trail.
- 6. Block surveys for cultural resources will be required for each pod.
- 7. No interim drilling will be allowed in the Sand Hills Area of Critical Environmental Concern as described in the Great Divide Resource Management Plan Record of Decision (RMP-1990).
- 8. The Great Divide RMP states the BLM will include intensive land-use practices to mitigate salt and sediment loading caused by surface disturbing activities within the Muddy Creek watershed. The Muddy Creek Coordinated Resource Management (CRM) group was established as an advisory group to address this issue. Because this area overlaps with the Muddy Creek CRM effort, and since road use contributes the most in increasing the amount of sediment in the Muddy Creek drainage, the POD/SUP will be reviewed by the Muddy Creek CRM Road Committee and recommendations of the group will be considered by BLM. Changes to the POD/SUP will be made prior to initiating work on the pod EA.
- 9. Surface discharge as a method of disposal for produced coalbed methane waters will be considered for each individual pod during interim drilling activities within the Great Divide Basin. This is subject to the approval of the Water Management Plan and upon obtaining all required federal, state and local permits.
- 10. Prior to completion of the EIS, water produced from coalbed methane wells located in the Colorado River Basin will be disposed of by re-injection. The only exception to this would be waters produced from the Double Eagle's coalbed methane existing and proposed wells located in the Cow Creek POD. Double Eagle has applied to the Wyoming Department of Environmental Quality (WDEQ) for a National Pollutant Discharge Elimination System (NPDES) permit for their two existing wells and four wells permitted recently by BLM. Should Double Eagle receive their state permit, they will be allowed to surface discharge from these six wells. Prior to any additional drilling of CBM wells by Double Eagle in the Cow Creek Pod, an environmental assessment, including a Water Management Plan, will be prepared and submitted to BLM which will examine the environmental impacts from these wells. Double Eagle will be allowed to dispose of produced CBM waters to the surface only after completion of the environmental analysis and a determination is made that the additional surface discharge will cause no significant impact to the environment.
- No drilling activities will be allowed in prairie dog towns during interim operations. However, drilling will be allowed in each individual pod containing prairie dog towns upon the completion of black-footed ferrets survey using methods approved by the United States Fish and Wildlife Service. These surveys will clear the pod for a one year period. The operators also have the option of completing surveys in the whole EIS area which would clear the area for the life of the project.

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In the event a black-footed ferret or its sign is found, the BLM Authorized Officer shall stop all action on the application in hand, and/or action on any application that may directly, indirectly, or cumulatively affect the colony/complex, and initiate Section 7 review with the USFWS. No project related activities will be allowed to proceed until the USFWS issues their biological opinion. The USFWS biological opinion will specify when and under what conditions and/or prudent measures the action could proceed or whether the action will be allowed to proceed at all.

- 12. No drilling or disturbance will be allowed in those areas determined to be critical winter habitat for sage grouse.
- 13. No drilling or disturbance will be allowed in areas where any two or more big game (elk, deer, or antelope) crucial winter ranges overlap.
- 14. The operators will be required to submit a drilling schedule as part of the Master Drilling Plan. This schedule will be reviewed, and approved by BLM, to ensure that activities are limited within proven big game migration corridors at critical use times during the year.
- 15. Pipelines, power lines, waterlines, fiber optic lines will be buried and, where possible, will follow the road rights-of-way.
- 16. Fish passage structures will be installed for roads which cross drainages with fisheries concerns as identified by BLM.

#### **Term/Definitions**

SENSITIVE RESOURCE AREAS are defined as those areas containing stabilized sand dunes, sensitive plant areas, raptor nesting concentration areas, prairie dog towns, two-mile buffer around sage grouse leks, mountain plover aggregation areas or potential habitat, big game migration corridors and crucial big game winter ranges, and areas with high density cultural or paleontological resource sites. Field inspections by the BLM will be conducted to verify presence of these resource values and potential impacts prior to considering authorization of any proposed development activity on Federal surface and/or minerals.

WILL BE AUTHORIZED means BLM will authorize the action if, following the environmental review of the APD or ROW application, sensitive resource areas are protected with appropriate stipulations or mitigation and the criteria established under CEQ regulation 40 CFR 1506.1 have been met. An environmental assessment (EA) will be completed for each individual pod prior to authorizing the proposal. Consultation and Coordination with the Wyoming Game and Fish Department and the U.S. Fish and Wildlife Service will occur when applicable for proposed activity within sensitive resource areas. The pod EA will identify the most environmentally acceptable access route, well site, and pipeline location. Mitigation measures developed from nearby project EISs and EAs for protection of resource values may be considered in the assessment. Any action proposed must be in conformance with the Great Divide Resource Management Plan (RMP) and mineral lease terms and conditions.

A coalbed methane pod may consist of two or more production wells, injection wells, access roads, product pipelines, water pipelines, power lines and other ancillary facilities designed specifically to assess the development potential of the play.

## APPENDIX B

FEDERAL, STATE, AND COUNTY PERMITS, APPROVALS, AND AUTHORIZING ACTIONS

## **APPENDIX B**

Table B-1. Federal, State, and County Permits, Approvals, and Authorizing Actions.

AGENCY	NATURE OF ACTION
DEPARTMENT OF INTERIOR	
Bureau of Land Management (Rawlins Field Office)	Approves Applications for Permit to Drill (APDs), Sundry Notices and Reports on Wells (sundry notices), production facilities, disposal of produced water, gas venting or flaring, and well plugging and abandonment for federal wells.
	Approval to dispose of produced water on BLM-managed lands.
	Grant ROWs to Operators for gas field development actions on BLM surface outside of federal lease or unit boundaries and to third party applicants (i.e., non-unit operator or non-lease holder) both within and outside of the unit boundary.
	Reviews inventories of, and impacts to cultural resources affected by undertakings, and consults with SHPO and ACHP.
(Casper District - Reservoir Management Group)	Review impacts on federally listed or proposed for listing threatened or endangered species of fish, wildlife, and plants, and consult with U.S. Fish and Wildlife Service.
	Grants Unit Area Agreement and subsequent actions relative to the unit.
	Administers drainage protection and protection of correlative rights on federal mineral estate.
U.S. Fish and Wildlife Service	Reviews impacts on federally listed, or proposed for listing, threatened or endangered species of fish, wildlife, and plants.  Migratory bird impact coordination.
DEPARTMENT OF THE ARMY	
U.S. Army Corps of Engineers	Issues (Section 404) permit(s) for placement of dredged or fill material in or excavation of waters of the U. S. and their adjacent wetlands.

AGENCY	NATURE OF ACTION	
WYOMING DEPART	WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY	
Water Quality	Administers Storm Water Pollution Prevention Plan.	
Division	Approves Surface Discharge.	
	Issue NPDES permits for discharging produced water and storm water runoff.	
	Approves wastewater and sewage disposal.	
	Permits to construct settling ponds an wastewater systems, including ground water injection and disposal wells.	
	Administrative approval for discharge of hydrostatic test water.	
Air Quality Division	Permits to construct and permits to operate.	
Land Quality Division	Mine permits, impoundments, and drill hole plugging on state lands.	
Solid Waste Division	Construction fill permits and industrial waste facility permits for solid waste disposal during construction and operations.	
WYOMING STATE E	NGINEER'S OFFICE	
	Issues permits to appropriate groundwater and surface water.	
	Issues temporary water rights for construction permits to appropriate surface water.	
WYOMING STATE HISTORIC PRESERVATION OFFICE		
	Provides consultation concerning inventory of, and impacts to, cultural resources.	
	Programmatic agreements, consultation.	

AGENCY	NATURE OF ACTION
WYOMING DEPARTMENT OF TRANSPORTATION	
	Permits for oversize, overlength, and overweight loads.
	Access permits to state highways
CARBON COUNTY	
CARBON COOKT	Grants small wastewater system permits, where applicable.  Issues driveway access permits where new roads intersect with county roads.  Prepares road use agreements and/or oversize trip permits when traffic on county road exceeds established size and weight limits or where the potential for excessive road damage exists.  Issues construction and conditional use permits for all new structures.  Administers zoning changes where applicable.

AGENCY	NATURE OF ACTION
WYOMING OIL AND GAS CONSERVATION COMMISSION	
	Acts as primary authority for drilling on state and privately held mineral resources, and secondary authority for drilling on federal lands.
	Holds authority to allow or prohibit flaring or venting of gas on private or state owned minerals.
	Regulates drilling and plugging of wells on private or state owned minerals.
	Issues Aquifer Exemption Permit
	Approves directional drilling.
	Administers rules and regulations governing drilling units.
	Grants gas injection well permits.
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